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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,791	04/02/2004	Cristian M. Neculescu	02734-0388-03	9925
22852	7590	06/14/2005	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			EASHOO, MARK	
			ART UNIT	PAPER NUMBER
			1732	

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/815,791

Applicant(s)

NECULESCU ET AL.

Examiner

Mark Eashoo, Ph.D.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 87-96 and 98-107 is/are pending in the application.
- 4a) Of the above claim(s) 87-95 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 96, 98-107 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION***Election/Restrictions***

Applicant's election with traverse of claim group IV, claims 96 and 98-107 in the reply filed on 02-APR-2005 is acknowledged. The traversal is on the ground(s) that there is no serious burden on the Office by examining all the claims since the search areas for each grouping would overlap. This is not found persuasive because the argument of applicant's attorney completely ignores that product claims, groups II and III, are searched and examined based upon the claimed structure and not the process of how the product was made. Furthermore, the two products as claimed recite different structures (ie. sheet and container) which require different search and examination considerations which causes serious burden on the Office. Similarly, the two process claim groupings require different process steps, namely that of extrusion (group I) and thermoforming (group IV), which require different search and examination considerations which causes serious burden on the Office.

The requirement is still deemed proper and is therefore made FINAL.

Claims 87-95 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected claim grouping, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 02-APR-2005.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 96, 98-103, and 105-107 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang (US Pat. 5,439,628) in view of Young (Introduction to Polymers, pgs. 196, 204).

Huang teaches the basic claimed process of forming a container, comprising: thermoforming (8:1-5); a mica filled polypropylene sheet which forms a rough/coarse surface because the filler effuses to

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the surface during processing (7:35-8:5 and 6:25-30); wherein the container material has excellent resistance to animal/vegetable fatty oils (4:55-68); pre-blended/admixed titanium dioxide (example 1); and a polyvinylidene fluoride processing aid (7:1-22). It is implicit that the filler effuses to the container surface not in contact during processing.

Huang does not teach vacuum thermoforming at a temperature of at least about 265°F. However, Young teaches that the melting point of polypropylene is about 368°F or 460K and a glass transition or softening point of about -10°F or 250K (pgs. 196, 204). Official Notice is given that vacuum thermoforming is well known in the molding art. At the time of invention a person of ordinary skill in the art would have found it obvious, if not implicit, to have used a vacuum thermoforming temperature in the range between the softening point and melting and optimized the processing conditions through routine experimentation, as commonly practiced in the art, in the process of Huang, and would have been motivated to do so in order to form a container having desirable texture.

The examiner recognizes that all of the claimed effects and physical properties are not positively stated by the reference(s). However, the reference(s) teaches all of the claimed ingredients, process steps, and process conditions. Therefore, the claimed effects and physical properties would inherently be achieved by carrying out the disclosed process. If it is applicants' position that this would not be the case: (1) evidence would need to be presented to support applicants' position; and (2) it would be the examiner's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties and effects by carrying out only these process steps.

Claim 104 is rejected under 35 U.S.C. 103(a) as being unpatentable over Huang (US Pat. 5,439,628) in view of Young (Introduction to Polymers, pgs. 196, 204) as applied to claims 96, 98-103, and 105-107 above, and further in view of Nakazima (US Pat. 5,001,176).

Huang teaches the basic claimed process as set forth above. Huang does not teach a silane coupling agent. However, Nakazima teaches a silane coupling agent (4:35-65). Huang and Nakazima are combinable because they are from the same field of endeavor, molding polyolefin articles. At the time of invention a person of ordinary skill in the art would have found it obvious to have used a silane coupling agent, as taught by Nakazima, in the process of Huang, since Nakazima suggests that such coupling agent improve the bonding between inorganic fillers such as mica and polyolefins such as polypropylene.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached form PTO-892.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise

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extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 96 and 98-107 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-21 of U.S. Patent No. US Pat. 6,719,943 in view of Huang (US Pat. 5,439,628) and Nakazima (US Pat. 5,001,176).

Although the claims are not identical, claims 1-21 of U.S. Patent No. US Pat. 6,719,943 substantially teach: vacuum thermoforming; a mica filled polypropylene sheet which forms a micronodular surface on the surface not in contact with a mold surface; wherein the container material has excellent chemical and mechanical resistance; admixed pigment and coupling agent; and a processing temperature of about 260°F.

Claims 1-21 of U.S. Patent No. US Pat. 6,719,943 do not teach a silane coupling agent. However, Nakazima teaches a silane coupling agent (4:35-65). At the time of invention a person of ordinary skill in the art would have found it obvious to have used a silane coupling agent, as taught by Nakazima, in the claimed process of U.S. Patent No. US Pat. 6,719,943, since Nakazima suggests that such coupling agent improve the bonding between inorganic fillers such as mica and polyolefins such as polypropylene.

Claims 1-21 of U.S. Patent No. US Pat. 6,719,943 do not teach titanium dioxide or a polyvinylidene fluoride processing aid. However, Huang teaches a pre-blended/admixed titanium dioxide (example 1) and a polyvinylidene fluoride processing aid (7:1-22). At the time of invention a person of ordinary skill in the art would have found it obvious to have used a pre-blended/admixed titanium dioxide (example 1) and a polyvinylidene fluoride processing aid, as taught by Huang in the claimed process of U.S. Patent No. US Pat. 6,719,943, since Huang suggests that such pigment yields a desired article color and that the processing aid improves mold release.

Claims 96 and 98-107 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. US Pat. 6,403,936 in view of Huang (US Pat. 5,439,628), Young (Introduction to Polymers, pgs. 196, 204) and Nakazima (US Pat. 5,001,176).

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Although the claims are not identical, claims 1-11 of U.S. Patent No. US Pat. 6,403,936 substantially teach: thermoforming; a mica filled polypropylene sheet which forms a micronodular surface on the surface not in contact with a mold surface; and wherein the container material has excellent chemical and mechanical resistance.

Claims 1-11 of U.S. Patent No. US Pat. 6,403,936 do not teach a silane coupling agent. However, Nakazima teaches a silane coupling agent (4:35-65). At the time of invention a person of ordinary skill in the art would have found it obvious to have used a silane coupling agent, as taught by Nakazima, in the claimed process of U.S. Patent No. US Pat. 6,403,936, since Nakazima suggests that such coupling agent improve the bonding between inorganic fillers such as mica and polyolefins such as polypropylene.

Claims 1-11 of U.S. Patent No. US Pat. 6,403,936 do not teach titanium dioxide or a polyvinylidene fluoride processing aid. However, Huang teaches a pre-blended/admixed titanium dioxide (example 1) and a polyvinylidene fluoride processing aid (7:1-22). At the time of invention a person of ordinary skill in the art would have found it obvious to have used a pre-blended/admixed titanium dioxide (example 1) and a polyvinylidene fluoride processing aid, as taught by Huang in the claimed process of U.S. Patent No. US Pat. 6,403,936, since Huang suggests that such pigment yields a desired article color and that the processing aid improves mold release.

Claims 1-11 of U.S. Patent No. US Pat. 6,403,936 do not teach vacuum thermoforming at a temperature of at least about 265°F. However, Young teaches that the melting point of polypropylene is about 368°F or 460K and a glass transition or softening point of about -10°F or 250K (pgs. 196, 204). Official Notice is given that vacuum thermoforming is well known in the molding art. At the time of invention a person of ordinary skill in the art would have found it obvious, if not implicit, to have used a vacuum thermoforming temperature in the range between the softening point and melting and optimized the processing conditions through routine experimentation, as commonly practiced in the art, in the claimed process of U.S. Patent No. US Pat. 6,403,936, and would have been motivated to do so in order to form a container having desirable texture.

Claims 96 and 98-107 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 48-61 of U.S. Patent No. US Pat. 6,100,512 in view of Huang (US Pat. 5,439,628), Young (Introduction to Polymers, pgs. 196, 204) and Nakazima (US Pat. 5,001,176).

Although the claims are not identical, claims 48-61 of U.S. Patent No. US Pat. 6,100,512 substantially teach: vacuum thermoforming; a mica filled polypropylene sheet which forms a micronodular surface on the surface not in contact with a mold surface; wherein the container material has excellent chemical and mechanical resistance; and titanium dioxide.

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Claims 48-61 of U.S. Patent No. US Pat. 6,100,512 do not teach a silane coupling agent. However, Nakazima teaches a silane coupling agent (4:35-65). At the time of invention a person of ordinary skill in the art would have found it obvious to have used a silane coupling agent, as taught by Nakazima, in the claimed process of U.S. Patent No. US Pat. 6,100,512, since Nakazima suggests that such coupling agent improve the bonding between inorganic fillers such as mica and polyolefins such as polypropylene.

Claims 48-61 of U.S. Patent No. US Pat. 6,100,512 do not teach a polyvinylidene fluoride processing aid. However, Huang teaches a polyvinylidene fluoride processing aid (7:1-22). At the time of invention a person of ordinary skill in the art would have found it obvious to have used a polyvinylidene fluoride processing aid, as taught by Huang in the claimed process of US Pat. 6,100,512, since Huang suggests that such processing aid improves mold release.

Claims 48-61 of U.S. Patent No. US Pat. 6,100,512 do not teach vacuum thermoforming at a temperature of at least about 265°F. However, Young teaches that the melting point of polypropylene is about 368°F or 460K and a glass transition or softening point of about -10°F or 250K (pgs. 196, 204). At the time of invention a person of ordinary skill in the art would have found it obvious, if not implicit, to have used a vacuum thermoforming temperature in the range between the softening point and melting and optimized the processing conditions through routine experimentation, as commonly practiced in the art, in the claimed process of U.S. Patent No. US Pat. 6,100,512, and would have been motivated to do so in order to form a container a having desirable and texture.

Correspondence

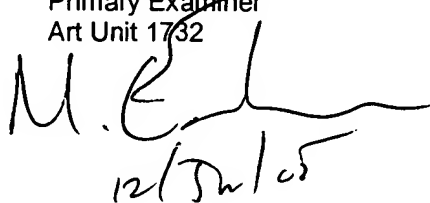
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Eashoo, Ph.D. whose telephone number is (571) 272-1197. The examiner can normally be reached on 7am-3pm EST, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

12-Jun-05
me

Mark Eashoo, Ph.D.
Primary Examiner
Art Unit 1732



12/5/05